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(54)Title: DETERGENT PARTICLES, PROCESS FOR PREPARING THE SAME, AND DETERGENT COMPOSITION HAVING HIGH BULK DENSITY

(54)発明の名称 洗剤粒子及びその製造方法、並びに高密度洗剤組成物

(57) Abstract

Detergent particles comprising a non-soap, anionic surfactant and an inorganic salt not detected by X-ray diffractometry, wherein the molar ratio of the inorganic salt to the surfactant is (0.1 to 1.0):1; and a process for preparing detergent particles comprising the step of dry neutralizing a liquid acid precursor of a non-soap, anionic surfactant with a water-soluble solid alkaline inorganic material, wherein an inorganic acid is used in an amount of 0.1 to 1.0 mol per mol of the liquid acid precursor of the surfactant. The detergent particles are featured by having very low particle tackiness and more pores, and the use of the same results in the formation of a detergent composition with a small diameter and a high bulk density in a high yield.

ABSTRACT

Detergent granules including a non-soap, anionic surfactant and an inorganic salt undetectable by X-ray diffraction method, wherein the molar ratio of [inorganic salt undetectable by X-ray diffraction method]/[non-soap, anionic surfactant] is from 0.1 to 1.0. A method for producing detergent granules, including the step of dry-neutralizing a liquid acid precursor of a non-soap, anionic surfactant with a water-soluble, solid, alkali inorganic substance. In this method, a dry-neutralizing step is carried out in the presence of 0.1 to 1.0 mol of an inorganic acid per mol of the liquid acid precursor of a non-soap, anionic surfactant. The above detergent granules have the features of extremely low tackiness of the granules and containing larger number of micropores. By using the detergent granules, a high-bulk density detergent composition having a small particle size can be obtained at high yields.